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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/007,149	12/05/2001	John R. Schneider	1646A1	1918

7590 07/21/2004

PPG INDUSTRIES, INC.
Intellectual Property Department
One PPG Place
Pittsburgh, PA 15272

EXAMINER

RAJGURU, UMAKANT K

ART UNIT	PAPER NUMBER
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1711

DATE MAILED: 07/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,149

Applicant(s)

SCHNEIDER ET AL.

Examiner

Umakant K. Rajguru

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 and 50-58 is/are pending in the application.
- 4a) Of the above claim(s) 34-41, 51 and 52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33, 42-45, 50 & 53-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. An RCE with an amendment has been filed on Mar. 19, 2004.
2. Claims under examination are 1-33, 42-45, 50 and 53-58.
3. Newly submitted claims 51 & 52 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Originally claimed invention is directed to a coating composition. The invention encompassed by claimed 51 & 52 is directed to a curable powder coating. These two invention are restrictable because of their recognized divergent subject matter and because search ^{art} for prior ~~art~~ for one invention may not result in prior art for other invention.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 51&52 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-7, 9, 13 and 15-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Stubbs et al (USP 5595578).

Stubbs discloses coated abrasives using polyurethane. Various abrasive particles are used in making the abrasives. Some of them are diamond, boron carbide, titanium carbide, silica, quartz, silicon nitride (col. 7, lines 15-26). Size of these particles is 0.1 to 1500 micrometers (col. 7, lines 27-38).

Above claims therefore lack novelty.

6. Claims 1-7, 9, 13, 15-27 and 30-33 are rejected under 35 U.S.C. 102(b) as being anticipated by Samuelson (USP 4048765).

Samuelson discloses non-cellular polyurethane wheel made out of a composition comprising (a) 3-10 parts mica, (b) ½-10 parts molybdenum disulfide, (c) 20-90 parts abrasive grains and (d) 100 parts polyurethane (col. 2, lines 1-11). Suitable abrasive grains include silicon carbide, aluminum carbide, diamonds, boron carbide etc (col. 6, line 64, to col. 7, line 2).

Above claims therefore lack novelty.

NR 7. Claims 1-7, 9-27, 29 and 42-50 and 53-58 are rejected under 35 U.S.C. ¹⁰³~~102~~(a) as being unpatentable over Stubbs et al (USP 4048765).

NR Claims 1-7, 9-33, 42-50 and 53-58 are rejected under 35 U.S.C. ¹⁰³~~102~~(a) as being unpatentable over Samuelson et al (USP 4048765).

NR Disclosures of these two patentees, presented earlier, prove that it would have been obvious to follow their teachings and arrive at above claimed invention.

Claim 10-12 compass aluminum which is ground, ungrounded, calcined and uncalcined. Stubbs and Samuelson are silent on these types of aluminum. It is the examiners position that since these types are known (see Monroe et al US 5611829) would be obvious to use any one of them in a composition for their better dispersibility characteristics. It is also obvious to prepare a coating in a solid form (i.e., powder) or in a liquid form as per requirements.

Claims 42-50 encompass certain limitations which are not specifically mentioned by either of the two references. Nonetheless since the claimed composition is disclosed

by the references, it is reasonable to infer, unless proved otherwise, that the composition of either reference, inherently satisfies these limitations.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stubbs et al (USP 5505578) or Samuelson (USP 4048765) as applied to claim 1 above, and further in view of Diener et al (USP 5614250).

Stubbs and Samuelson fail to disclose the three types of silica (of instant claim 8.)

Diener discloses coated fillers, one of which is silica. In col. 4, lines 28-49, patentee mentions the types of silica (of instant claim 8).

Therefore it would have been obvious to use any of the three types of silica in the respective composition of either Stubbs or Samuelson for better dispersibility.


9. In dependent claims 1 & 42 now encompass a limitation of difference in refractive indices. This limitation is specifically not mentioned in prior art. Nonetheless, following the reasoning stated earlier, it is proper to assume that prior art composition satisfies this limitation also unless proved otherwise.

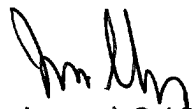
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Umakant K Rajguru whose telephone number is 571-272-1077. The examiner can normally be reached on Monday thru Friday from 9:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on 571-272-9306. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Rajguru/LR
June 9, 2004


James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700